

LANSF
12.3.148.1
6/19/96

*Preliminary
Environmental Assessment
660 Othello Street and
606 Myrtle Street
Seattle, Washington*

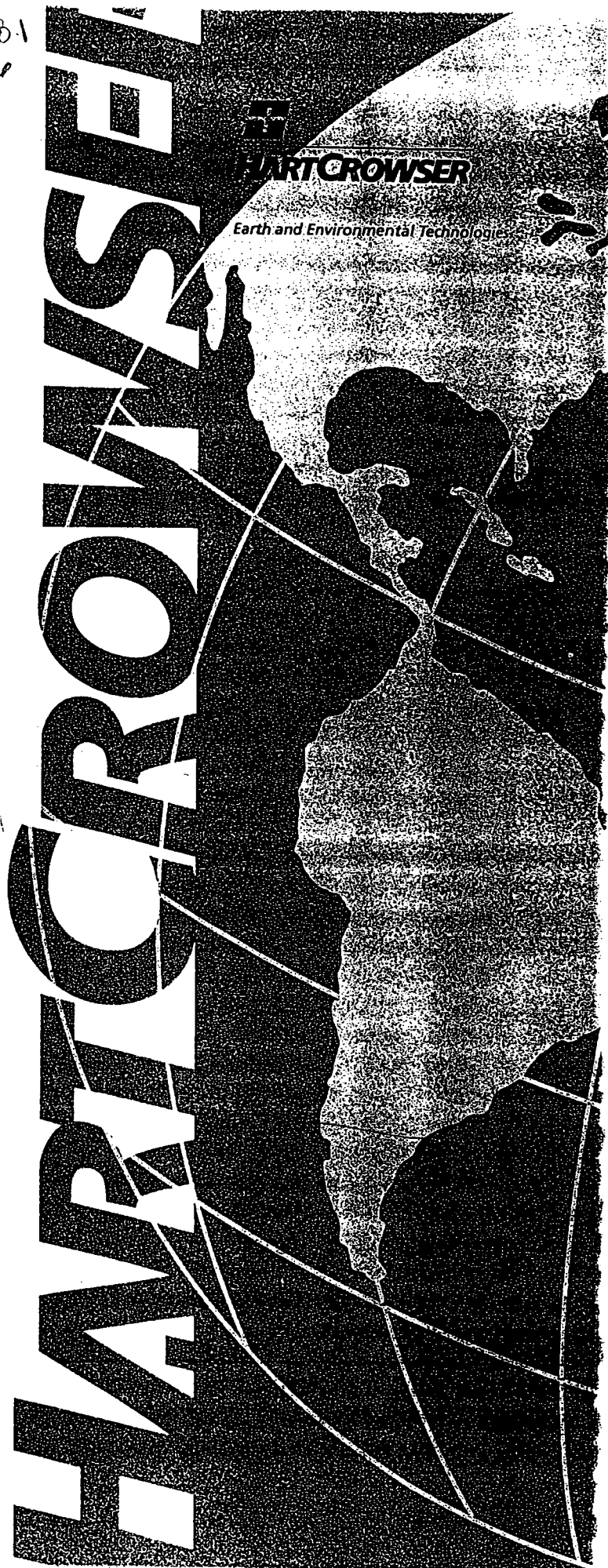
*Prepared for
Maple Leaf Property
Management*

*June 19, 1996
J-4548(A)*

USEPA SF



1376791



CONTENTS

	<u>Page</u>
1.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS	1
<i>1.1 Potential On-Site Environmental Concerns</i>	1
<i>1.2 Potential Off-Site Sources of Environmental Concern</i>	4
2.0 INTRODUCTION	5
3.0 SITE DESCRIPTION/SITE RECONNAISSANCE	6
<i>3.1 Location and Description</i>	6
4.0 GEOLOGY AND HYDROGEOLOGY	8
<i>4.1 Regional Geology and Hydrogeology</i>	8
5.0 REGULATORY AGENCY LIST AND FILE REVIEW	10
<i>5.1 Regulatory List Review</i>	11
<i>5.2 Agency File Review</i>	13
6.0 SITE HISTORY	15
<i>6.1 Subject Property</i>	16
<i>6.2 Surrounding Properties</i>	19
7.0 RESULTS OF ASSESSMENT	22
<i>7.1 Subject Property</i>	22
<i>7.2 Adjacent Properties</i>	23
<i>7.3 Limitations</i>	23

CONTENTS (Continued)

Page

FIGURES

- 1 Vicinity Map
- 2 Site Plan and Adjacent Properties
- 3 Site Plan for the Subject Property - Circa 1943

**APPENDIX A
LEGAL DESCRIPTION OF SUBJECT PROPERTY**

**APPENDIX B
SITE RECONNAISSANCE PHOTOGRAPHS**

**APPENDIX C
VISTA REPORT AND MAP REPORT
VISTA INFORMATION SOLUTIONS, INC.**

**APPENDIX D
POLK DIRECTORY LISTINGS
STUDY AREA FIRMS WITH POTENTIAL
FOR ENVIRONMENTAL EFFECTS**

PRELIMINARY ENVIRONMENTAL ASSESSMENT
660 OTHELLO STREET AND
606 MYRTLE STREET
MAPLE LEAF PROPERTY
SEATTLE, WASHINGTON

1.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS

The following summarizes our findings concerning potential adverse environmental conditions resulting from current and past activities at the subject property and neighboring properties.

1.1 Potential On-Site Environmental Concerns

Historical Land Use

Past operations at the subject property included iron-works, ship building, aluminum manufacturing, steel can manufacturing, and most recently shipping and trucking operations related to the paper industry. Potential on-site sources include release(s) from on-site Underground Storage Tanks (USTs), which have been reportedly closed-in place or removed, the former Above-ground Storage Tanks (ASTs), which have been removed, and pasts uses of solvents and chemicals used in the above-noted manufacturing processes.

Parcel B appears to have the most potential for impacts from on-site sources based on the location of USTs, most of which reportedly have been removed, and the fact that this parcel was the major location of the historical canning operations. Findings from a limited soil and groundwater investigation by Earth Consultants in 1988 on Parcel A, identified one soil sample with a total petroleum hydrocarbon (TPH) concentration of 402 ppm which exceeds the Ecology Model Toxics Control Act (MTCA) cleanup level of 200 ppm. One groundwater sample contained 4.7 ppb of tetrachloroethylene which is close to but below the MTCA cleanup level of 5 ppb. Given the uncertainty related to the closure of the former USTs, further sampling may be warranted.

Parcel D may also have been impacted by the stripping, cleaning, and painting of steel cargo containers operations that took place in the late 1980s.

Corr 2.

Recommendation. Additional subsurface investigation should be conducted and soil and groundwater samples analyzed for TPH in the vicinity of the former USTs on Parcel B. Further investigations should be

conducted to document the location of the former UST(s) and the locations of USTs which have been closed in-place to evaluate soil conditions at these vicinities and to ensure that these tanks have been properly closed.

In order to better assess potential impacts related to historical operations on Parcel B such as ship building, and steel can manufacturing, soil and groundwater sampling for the following constituents is also suggested on Parcel B: heavy metals including; cyanides, lead, copper, tin, nickel, chromium, iron, magnesium, and zinc; polyaromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). Suggested sampling locations would be to the west of the former painting building (see Figure 3) and in the vicinity of former floor drains associated with the milling and drilling operations and steel pattern shop. Earth Consultants Inc. (EC) sampled for twelve heavy metals (B-1 and B-2) and generally found concentration at background levels for these metals. While those sampling locations provide some information, additional samples closer to historic operations are recommended along with the collection of near-surface samples. Chlorinated solvents would be another recommended constituent for sampling; however, information does exist for these constituents from the Hart Crowser Technical Memorandum No. 11 discussed later. It might also be difficult to distinguish the source and extent of these constituents on the subject property between past historic uses and off-site sources.

Parcel A is the former location of an incinerator associated with the canning operations and previously the site of the Rothbert Steel Corporation where an electric steel smelter was located. It is suggested that soil and groundwater samples be collected and analyzed for PCBs, heavy metals and PAHs. Additional investigation would be required to determine the location of the former smelter in relation to the built-up shoreline but it is was in the generally vicinity of the southeast corner of Parcel A.

Parcel D was the former location of a container stripping and painting operations. Recommend sampling on this parcel could include several soil samples for heavy metal analysis and Volatile Organic Compounds (EPA Priority Pollutant List).

Fill Material/Sediments

Fill material has been placed along the west side of the subject property, adjacent to the Duwamish River, from at least the 1960s up to the 1980s. Several Dredge and Fill Permits were obtained by Manson Construction (former owner of the subject property) during that time period. There is a potential that dredge materials from the Duwamish River may have been placed on the subject property. There is a limited potential that adversely

impacted fill material from off-site sources may have been placed on the subject property.

However, data from the Hart Crowser Technical Memorandum No. 11 for the GWCC, indicate that shellfish adjacent to the subject property have not been adversely impacted.

Asbestos

Asbestos abatement was conducted at the subject property in the late 1980s. Asbestos-containing pipe insulation was identified in the office building at 601 South Myrtle Street during a 1988 Preliminary Environmental Assessment and was reportedly abated. No pipe-insulation in the office building or adjacent warehouse was observed. Suspect asbestos-containing materials (ACMs) such as floor tiles, ceiling tiles, and window putty were observed in the three main structures on the subject property. These materials generally appeared to be in good condition with the exception of window putty. No observations were made of roofing material.

Recommendation. An asbestos survey is recommended in the event that suspect ACM is observed in a deteriorated condition and/or prior to building demolition or renovations.

Lead-Based Paint

Several LeadCheck™ swab samples were taken of peeling paint in the office building and adjacent warehouse. These swabs were negative for lead. However, given the age of these two buildings there is a potential that lead-based paint is present. The exterior and interior of the warehouse on Parcel C is not painted. However, some lead-based paint may be present in the office and staff areas.

Recommendation. Lead monitoring should be conducted during building demolition or renovations to ensure that appropriate worker health and safety measures are implemented, as necessary.

Fluorescent Light Ballasts and Tubes

Fluorescent light ballasts often contain polychlorinated biphenyls (PCBs), a toxic chemical strictly controlled in terms of disposal by the U.S. Environmental Protection Agency (EPA). Also, the fluorescent light tubes contain mercury vapor, which can be released if the tubes are damaged or broken in an uncontrolled manner, such as during demolition or renovation. Fluorescent lights and ballasts are located in the Office

Building and adjacent warehouse located on Parcel B. No leaking ballasts were observed during the site visit. The Earth Consultants, Inc. (EC) report states that the ballasts on the first floor of the office building were not labeled "PCB-free" and therefore are assumed to be PCB-containing.

Recommendation. All fluorescent light ballasts should be removed by experienced workers prior to building demolition or renovations to the lighting system, and either recycled (method preferred by King County) or disposed of at an approved PCB-waste handling facility. Removal of the ballasts does not involve a chemical or health hazard to the workers, so regular demolition labor may be used for this task. The ballasts should be accumulated into proper disposal containers, however, for pickup and transport to the disposal/recycling facility. Those ballasts that are labeled "PCB free" may be disposed of at a sanitary landfill.

The fluorescent light tubes should be removed from the fixtures, and other areas where they are currently stored and recycled by a vendor specializing in that task.

1.2 Potential Off-Site Sources of Environmental Concern

The subject property is located in an industrialized portion of Georgetown located in South Seattle (Figure 1). There are twenty sites within a 5/8 mile radius of the subject property that are on the Washington State Register of Toxic Sites and thirty-five sites within the same radius with confirmed releases from USTs. There is a potential that groundwater on the subject property has been adversely affected from off-site sources including Great Western Chemical Company, Puget Sound Freight, Sternoff Metals, National Steel Corporation Company, and Northland Services, Inc., as discussed below.

Recent soil vapor and groundwater quality tests were accomplished on the subject property at the request of Ecology and funded by the Great Western Chemical Company (GWCC), (located to the northeast of the subject property), to determine if the subject property has been impacted by releases at GWCC. Data indicate that a contaminated groundwater plume of chlorinated solvents is present at the northwestern corner of the subject property.

Recommendation. The findings of the GWCC-funded sampling effort at the subject property should be evaluated to further assess potential impacts, if any, from this contaminated groundwater plume. An ongoing dialogue with GWCC should be established to keep informed of remediation efforts at GWCC. In addition, other potential off-site sources should be evaluated

to determine whether groundwater effects are present on the subject property.

2.0 INTRODUCTION

This report presents the results of our preliminary environmental assessment at the property located at 660 Othello Street and 606 Myrtle Street in Seattle, Washington (Figure 1). This project was completed in accordance with our proposal (96-47-1080), dated February 14, 1996. Our preliminary environmental assessment provides information on the current conditions and the past practices at the property to evaluate whether it is likely that potentially adverse environmental conditions may be present on the subject property. We understand that Othello Street Warehouse Corporation, represented by Maple Leaf Property Management, is interested in selling the property and that a preliminary environmental assessment is necessary to assist in the evaluation of the subject property.

Hart Crowser's assessment of the subject property included the following:

- ▶ Researching and reviewing historical background records for the property and immediately adjacent areas;
- ▶ Reviewing regulatory agency database lists for the subject property and adjacent sites;
- ▶ Reviewing Earth Consultant's Preliminary Environmental Study of the subject property (October 4, 1988);
- ▶ Contacting the Region 10 Office of the Environmental Protection Agency (EPA) in Seattle, and the Ecology Northwest Regional Office in Bellevue, to review current available files for the subject property and adjacent properties identified during the database list review;
- ▶ Interviewing individuals with knowledge of past and current site activities;
- ▶ Reviewing available King County tax records;
- ▶ Reviewing City of Seattle building department records;
- ▶ Conducting a site reconnaissance to observe the subject property and a walk-by reconnaissance to observe surrounding properties; and
- ▶ Preparing this report presenting the findings of our work.

3.0 SITE DESCRIPTION/SITE RECONNAISSANCE

On April 30, 1996, Holly Sawin of Hart Crowser conducted a site reconnaissance to observe the subject property and current business/land use in a two-block radius. Ms. Sawin was accompanied by Don Romkee, Terminal Superintendent for Pacific Terminal Inc., a tenant at the subject property. Mr. Romkee has approximately 17 years of experience at the property. The following observations were recorded.

3.1 Location and Description

Subject Property

The subject property is comprised of Parcels A, B, C, D (Figure 2) and Parcel E and is approximately 13 acres in area (Figures 1 and 2). Parcels A and C, and the warehouse located on Parcel B are currently leased to Pacific Terminal, Inc., a paper products distributor. Their main operations are located in the warehouse located on Parcel C (Photograph 1, Appendix B). Materials are brought in by barge and unloaded by a stationary crane located on Parcel A (Photograph 2). The administrative offices of Northland Container Services are located on the second floor of the office building on Parcel B (Photograph 4). Parcel D is a vacant area of land with a cyclone fence around it. Parcel E is an easement located along Seventh Avenue South. The legal description for the subject property is presented in Appendix A.

Parcel A. Structures on Parcel A include: a corrugated steel maintenance shop; a welding shop; an on-site vehicle washing outbuilding and associated shed which houses a washwater treatment system and small quantity of fuel oils (Photograph 3, note limited staining in the foreground); a concrete bermed propane tank filling and storage area; and a propane AST. Additional features include a stationary 60-ton crane, which is located adjacent to the Duwamish waterway.

Parcel B. This parcel includes three buildings; a 15,000-square-foot two-story office building constructed of reinforced concrete, a 33,000-square-foot woodframe warehouse, and a two-story dock yard house. The office building and warehouse are heated with electric heat by ceiling forced-air units. The dock yard building is no longer in use. The yard is primarily paved with asphalt except for several unpaved patches. A foundation is located adjacent and south of the warehouse that is used as an unloading dock associated with the rail spur.

The first floor of the office building is vacant. Potential asbestos-containing material (ACM) was observed on this floor (i.e., floor tiles and

window putty). Mr. Romkee stated that asbestos-containing pipe insulation was formerly present on this level and in the basement, and had been abated in the late 1980s. Cracked and peeling paint was observed in one of the offices toward the south end of the building. A LeadCheck™ swab was negative for lead. Several additional LeadCheck™ samples were taken on the exterior paint of the office building and warehouse and these swabs were also negative for lead. Several older fluorescent light fixtures were observed, which have the potential to contain PCB-containing ballasts; however, no leakage was observed.

The second floor is the administrative offices of Northland Services Containers, a tug and barge shipping company which has been a tenant at this location since 1987. The second floor has been remodeled and appeared well-maintained. No hazardous materials were observed stored in this building.

The adjacent wood-frame warehouse is currently used by Pacific Terminal, Inc. Mr. Romkee informed Hart Crowser that renovations had been made to the warehouse in the late 1980s, which included a new asphalt roof and floor. The warehouse appeared well-maintained. A propane-powered forklift was observed loading products in the warehouse. The warehouse is currently used for storing paper goods and equipment.

A stationary crane is located at the northwest corner of this parcel and is reportedly not in working order. The adjacent dock is used to unload container barges by various shipping companies located in the area. A barge was observed at this dock during the site visit.

Parcel B is also the location of the former USTs and ASTs. No signs of USTs such as vent pipes and fill ports were observed (see Figures 2 and 3 from approximate locations).

Parcel C. A 118,500-square-foot, 165-foot by 770-foot, concrete tilt-up warehouse occupies most of Parcel C. The warehouse is approximately 25 feet high and has a concrete slab floor. The warehouse includes office space for administrative staff at the east end.

Stacks of paper products were observed in the warehouse. Propane-powered fork lifts were observed inside the warehouse moving paper products. Pacific Terminals Inc. reportedly has used propane-powered vehicles on the property for at least nine years. Toward the center of the warehouse is a two-story office area used by the yard staff. A lunch room and a conference room were observed on the main floor, and several offices and a restroom were observed on the second floor.

The south side of this warehouse has thirty truck docks, three of which are reportedly currently not in use. A rail spur parallels the north side of the warehouse, where ten rail docks are located. The south side of the warehouse has a paved parking area. Othello Street is unpaved.

Parcel D. Parcel D is an unpaved, relatively flat rectangle parcel that is approximately a half acre in area. It is surrounded by a cyclone fence and was vacant during the time of the site visit. No signs of oil stains were observed.

Utilities. Electric service and storm water/sewer service are provided by the City of Seattle. Lighting throughout the office and associated warehouse are fluorescent. The warehouse building on Parcel C has energy-saving lights.

Surrounding Sites

The surrounding land use is generally industrial. The property is bounded to the north by the Seattle Boiler Works; to the east by Tempress, a plastic manufacturer; to the south by Puget Sound Truck Lines; and to the west by the Duwamish River.

A more extensive review of surrounding land-use is provided in the **REGULATORY AGENCY LIST AND FILE REVIEW** and **PROPERTY HISTORY** sections.

4.0 GEOLOGY AND HYDROGEOLOGY

4.1 Regional Geology and Hydrogeology

Soil and groundwater data, provided in a 1988 Preliminary Assessment of the subject property prepared by Earth Consultants, indicate the subject property has an upper fill horizon ranging from 2 to 7 feet thick. The fill consists of wood fragments and concrete demolition debris in a fine- to medium-grained sand matrix. This is reportedly underlain by fine- to medium-grained sand.

According to Hart Crowser investigations in the site vicinity, the general groundwater flow direction is south to southwest. At the time of the Earth Consultants field investigation at the subject property, groundwater was encountered at a depth of 11 feet below ground surface.

Previous Environmental Assessment

**Earth Consultants (EC), Inc. - Preliminary Environmental Studies;
Yard 2 Property, Prepared for LARCO Development Group, EC File
Number E-4084, October 4, 1988**

The following is a summary of the findings of the above-referenced report. Confirmed asbestos-containing pipe insulation in friable condition was reported in the office building and warehouse on Parcel B. PCB-containing light ballasts were observed in the first floor of the office building. One ballast was observed to be leaking a brown viscous fluid. USTs and ASTs were reportedly removed from the subject property. Based on an interview with a former on-site employee, EC reports that fill material from the U.S. Navy Bremerton Shipyard or Bangor Submarine base may have been placed on the property.

Based on concerns pertaining to potential on-site and off-site sources of petroleum contamination, EC advanced three soil borings and installed two monitoring wells. Attempts by EC to drill several borings in the general area of the former tank cluster were unsuccessful as the area is underlain by a concrete slab, which was reportedly the former floor of a warehouse. EC reported a groundwater flow direction to the northwest. Boring B-1 was located adjacent to the ASTs and former USTs. Borings B-2 and B-3 were positioned to sample potential fill material. Analytical results for soil samples were below MTCA cleanup requirements of 200 ppm for TPH with the exception of one sample collected from boring B-2 (Figure 2) which had a TPH concentration of 402 ppm at a depth of 2.5 feet. A groundwater sample collected from boring B-2 contained less than 1.5 ppm petroleum hydrocarbons. A groundwater sample collected from boring B-1, which was located north of the five ASTs, contained traces of several solvents. This sample contained 16 ppb of 1,1,1-trichloroethane, 2.5 ppb of 1,1,2-trichloroethylene, and 4.7 ppb of tetrachloroethylene. These concentrations are below MTCA Method A cleanup level requirement. A groundwater sample from boring B-3 reportedly contained less than 50 ppb of polychlorinated biphenyls (PCBs).

EC concluded that if further confidence was required with regard to potential petroleum-related impacts from the former USTs, that attempts should be made to determine their exact locations and further sampling and analysis should be conducted in those locations.

5.0 REGULATORY AGENCY LIST AND FILE REVIEW

The purpose of this review is to acquire regulatory agency file information for the subject property and to identify potential sources of contamination or activities of environmental concern. The review is limited to current files and does not include a review of archived information.

VISTA conducted a review of the regulatory agency database lists defined below. The report of the database search provided by VISTA included a list of databases searched, a statistical profile indicating the number of listed properties within 1½ mile of the subject property, selected detailed information from federal and state lists, and an overview map illustrating the identifiable and mappable sites within 1½ mile of the subject property. The report generated by VISTA, which includes maps illustrating the agency-listed sites, is provided in Appendix C.

Regulatory agency lists reviewed and search distances are detailed below:

- ▶ U.S. Environmental Protection Agency (EPA) National Priorities List (NPL) (September 1995) - List of "Superfund" sites (search radius of 1½ mile);
- ▶ EPA Region 10 CERCLIS (December 1995) - List of sites currently being reviewed for possible inclusion on the NPL (search radius of 1½ mile);
- ▶ EPA Region 10 RCRA-TSD (February 1996) - List of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste (search radius of 1½ mile);
- ▶ EPA Region 10 RCRA Corrective Action Sites (CORRACTS) (February, 1996) - List of RCRA facilities which are undergoing corrective action (search radius of 1½ mile);
- ▶ EPA Region 10 RCRA Violators (RCRA-Viols/En) (February 1996) - List of RCRA facilities that have been cited for RCRA violations at least once since 1980 (search radius of 3/4 mile);
- ▶ EPA Region 10 Toxic Release Inventory System (TRIS) (May 1995) - Inventory of toxic chemicals emissions from certain facilities (search radius of 1/4 mile);
- ▶ EPA Emergency Response Notification System (ERNS) List (December 1995) - List of reported CERCLA hazardous substance releases or spills (search radius of 1/8 mile);

- ▶ NFRAP List (December 1995) - List of sites where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to require Federal Superfund action or NPL consideration (search radius of 1 mile);
- ▶ Ecology Confirmed and Suspected Contaminated Sites Report (SPL and SCL) (November 1995) - List of sites currently being investigated by Ecology under the Model Toxic Control Act (MTCA) (search radius of 1½ mile);
- ▶ Ecology Leaking Underground Storage Tank (LUST) List (November 1995) - List of registered leaking USTs in Washington (search radius of 1 mile);
- ▶ Ecology Underground Storage Tank (UST) Registration List (April 1996) - List of USTs registered in Washington (search radius of 1/4 mile);
- ▶ Ecology Solid Waste Facility List (SWFL) (December 1995) - List of permitted solid waste landfills operating in Washington (search radius of 1½ mile); and
- ▶ Ecology Toxic Cleanup Program Site Register (WA Site Register) (December 1995) - List of sites registered with Ecology Toxics Cleanup Program and being cleaned up under the Model Toxics Control Act (MTCA) (search radius 1 mile).

On April 10, 1996, we made Freedom of Information Act (FOIA) requests to Ecology and EPA Region 10 to inquire about the availability of regulatory file information for the subject property and any identified nearby properties regarding potential sources of contamination or activities of environmental concern to the subject property. At the time of report production, we have not received documentation from EPA regarding the subject property or surrounding properties. Information submitted to Hart Crowser from EPA that is additional to the information presented in this letter report with respect to the subject property will be submitted to you upon receipt.

5.1 Regulatory List Review

Subject Property

The subject property, listed as the **Manson Construction Company** (VISTA Site 1) at 601 South Myrtle Street, appears on the UST list. Two 10,000-gallon tanks appear on Ecology's UST list. One reportedly

contained heating oil with an exempt status, and the other tank's content and status are listed as unknown.

Surrounding Properties

Surrounding sites identified on one or more regulatory agency database lists and located sufficiently close to the subject property, that are in the inferred upgradient or cross-gradient groundwater flow direction from the subject property are listed below. Directions and distances given are approximate positions in relation to the subject property. Below is a summary of the VISTA report listings.

- ▶ **Great Western Chemical Company (CWCC)** (VISTA Site 3), located at 6900 Fox Avenue South, which is approximately 500 feet to the northeast of the subject property in the inferred upgradient groundwater direction, appears on the SPL, LUST, and UST lists.
- ▶ **Whitehead Company Corp.** (VISTA Site 1A), located approximately 300 feet to the northeast of the subject property, is listed as having two 1,100-gallon each leaded gasoline USTs removed.
- ▶ **Nelson Trucking Company** (VISTA Site 1C), formerly located at 719 South Myrtle Street (present location of Caffè D'Arte), which is approximately 200 feet to the east of the subject property in the inferred upgradient groundwater flow direction, appears on the UST list. VISTA reports this facility as having six USTs removed.
- ▶ **Tempress Inc.** (VISTA Site 1B), located at 701 South Orchard Street, which is adjacent to the subject property to the west of Parcel C and to the east of Parcel D, appears on the RCRA Small Generator list.
- ▶ **Puget Sound Freight Lines** (VISTA Site 7), located at 7303 8th Avenue South, to the immediate south of the subject property in the inferred downgradient groundwater flow direction, appears on the LUST and UST lists. VISTA reports this facility as having two LUSTs which were reported on June 12, 1991, with a release to the soil. The status is reported as case closed and cleanup complete. Four USTs are reported as having been removed.
- ▶ **Sternoff Metals** (VISTA Site 9), located at 7901 Marginal Way East, located approximately 1,000 feet to the east of the subject property, appears on the SPL and CERCLIS lists. VISTA reports this site as undergoing an Independent Remedial Action with metals, cyanide, and PCBs as the contaminants of concern.

A number of facilities on the VISTA report appear on the RCRA, UST, and TRIS lists. These lists indicate hazardous waste generation, registration of underground storage tanks, and use of an EPA-listed toxic chemical in manufacturing, respectively, and do not necessarily indicate releases to soils and/or groundwater.

On April 22 1996, Holly Sawin of Hart Crowser reviewed available agency files at Northwest Regional Office of Ecology in Bellevue, Washington. Ecology had file information for the following businesses: Pacific Terminal Inc. (subject property), Great Western Chemical Company, Puget Sound Freight, and Sternoff Metals. No file information on Nelson Trucking was available at Ecology. A summary of these file reviews is presented below.

5.2 Agency File Review

Subject Property

Ecology had one file for Pacific Terminals Inc. located at the 660 Othello Street address. The file contained a Form 2-Notification of Dangerous Waste. A first time notification was given on June 19, 1989, to dispose of 4,500 pounds of waste oil, methyl ethyl ketone (MEK), and 1,1,1-trichloroethane.

There was no UST file for the subject property. During a May 23, 1996, telephone conversation with Lisa Screiber of Ecology, we were informed that additional database information pertaining to this site stated that one 10,000- to 20,000-gallon tank had been closed in-place. The date of reported last use was March 1983, and its contents were reported as water-soluble fluid cutting wastes. An additional 10,000- to 20,000-gallon tank that contained heating oil was listed as exempt. The location of these tanks is not known. The City of Seattle Fire Department was contacted on May 23, 1996, to obtain information regarding the heating oil UST; however, they did not have records for any USTs at this address.

Surrounding Properties

Great Western Chemical Company has operated a chemical and petroleum repackaging and distribution facility at 6900 Fox Avenue South since the mid-1950s. Soil and groundwater contamination from petroleum and solvent products have been identified and currently are under investigation under a Consent Decree process between the Ecology and Great Western Chemical Company. A Remedial Investigation and Preliminary Risk Assessment, prepared by Hart Crowser, dated December 1993, reports that a variety of chemical constituents have been found beneath and downgradient of the site. Hart Crowser reports that of the

seventy-four chemicals or chemical groups of interest detected at this site, tetrachloroethene (PCE) represents the primary risk to human health and the environment. PCE and other constituents are reported as having migrated to the southwest toward the Duwamish Waterway.

On July 27, 1994, Ecology agreed to modify the Agreed Order as proposed by Great Western Chemical Company to approve construction of interim remedial measures which include soil vapor and groundwater treatment and the permanent closure of the six remaining chemical product storage USTs.

In a May 22, 1996 conversation, Mike Bailey, the Hart Crowser Project Manager for work at the Great Western Chemical Company site, stated that additional off-site sampling and testing of soil vapor and groundwater was being accomplished by Great Western on adjacent properties in response to Ecology's request.

A Hart Crowser report, Technical Memorandum No. 11 Off-Site GeoProbe Study and Baseline and Analysis Results, Great Western Chemical Company Facility, Seattle, Washington, dated June 7, 1996, presents results from soil vapor and groundwater sampling that was conducted to define the extent of the contaminant plume originating on the Great Western site. Both soil vapor and groundwater samples were collected at the subject property.

Data indicate that the groundwater plume of chlorinated ethanes that is centered on the GWCC property has migrated to the northwest corner of the subject property. Tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-1,2-DCE) were the primary volatile organic compounds detected. None of the GeoProbe soil vapor sample results taken at the subject property exceeded Remedial Action Objectives (RAOs). Groundwater data indicate that the first water-bearing zone has lower concentration of chlorinated solvents than the second water-bearing zone. The groundwater concentration of tetrachloroethylene (PCE) exceeds surface water protection levels at a seep sampling location located at the northwest corner of the subject property adjacent to the Duwamish waterway.

Whitehead Company Corporation. There were no regulatory files available for the Whitehead Company Corporation located at 600 South Myrtle Street.

Puget Sound Freight had four USTs removed in October of 1990. An Applied Geotechnology Inc. final report, UST Removal and Soil Contamination Assessment and Remediation, dated May 31, 1991, states that the following USTs were removed; one 30,000-gallon diesel fuel, one

10,000-gallon diesel fuel, one 2,000-gallon gasoline, and one 1,000-gallon waste fuel oil. Approximately 250 cubic yards of soil with petroleum hydrocarbon concentrations above Ecology cleanup levels were excavated and treated on-site using solid phase remediation techniques. Two hundred cubic yards of remediated soil was transported to Coal Creek landfill for disposal.

Sternoff Metals is a 3-acre site which operated as a scrap metal yard. This is the current location of Remedco Inc. Environmental Services. Seacor prepared a feasibility study for the site, dated June 17, 1991. Findings of this study indicate that sediment samples collected from storm drains and soil samples collected on the site contained concentrations of lead, mercury, PCBs, and TPH which exceed MTCA cleanup levels. An estimated 70,000 cubic yards of sediments and 20,000 cubic yards of soil were identified as exceeding MTCA cleanup levels. According to Seacor, groundwater flows in a southerly direction from this site. Groundwater samples exceeded MTCA cleanup requirements for lead and TPH.

In a May 22, 1996, phone conversation with Dan Cargill of Ecology, we were informed that to his knowledge no remediation had occurred on this site to-date and that Ecology's database needed to be updated to reflect that an Independent Remedial Action was not taking place. Further, he said that it is a low priority site for Ecology at this time.

6.0 SITE HISTORY

We researched the history of land use activities on the subject property and adjacent properties to identify and evaluate potential sources of contamination or activities that could impact the subject property.

Historical characterization was developed from the following sources:

- ▶ Aerial Photographs, (Walker & Associates, 1956, 1960, 1985, 1990; Pacific Aerial Surveys, 1981, 1982, and 1985; H.G. Chickering, 1965; and Washington State Department of Natural Resources, 1970);
- ▶ USGS Topographic Maps (7½ minute quadrangle Seattle South, Washington, 1973 and 1994);
- ▶ Sanborn Fire Insurance Maps (South Seattle, 1917, 1929, 1949, and 1950);
- ▶ County Directories (Polk's - Seattle, 1938, 1948, 1959, 1969, 1979, and 1989);

- ▶ County Atlas (Kroll - Seattle, 1920, 1950, 1966, and 1987);
- ▶ Washington State Tax Assessor's Records;
- ▶ Interview with Don Romkee, Terminal Superintendent at the subject property for approximately 17 years;
- ▶ Interview with Glen Edwards, current owner of Manson Construction;
- ▶ Interview with Dan Dolmseth, former Chief Financial Officer for Manson Construction; and
- ▶ Interview with Ray Aspiri, Manager of Tempress.

No Chain of Title documents were available for review.

Dates in the text refer to historical occupancy records and interviews, and provide an approximate indication of the period of operation for each business or activity identified, except where explicitly stated.

6.1 Subject Property

History of Ownership

The subject property is located in the lower Duwamish River Valley near Georgetown. The river formerly meandered through the area until a 1913 to 1916 dredging program provided a straightened channel. The 1917 and 1929 Sanborn maps depict the subject property as the location of the Seattle-Astoria Iron Works.

The 1929 Sanborn map indicates that Seattle-Astoria Iron Works expanded to the south to include the former shipyard property. According to the Polk City Directories, the subject property was occupied by the Continental Can Company, Inc. from approximately 1936 to 1985 at the 601 South Myrtle Street address. However, City of Seattle Building Department records indicate that the buildings on Parcel B were constructed in 1929 for the Continental Can Company. Continental Can reportedly manufactured cans for use in the salmon canning industry.

Washington State Tax Assessor's records indicate that Rothbert Steel Corporation was established in the vicinity of Parcel A in 1910. Structures included an electric steel smelter and ore storage area. Continental Can is listed as the owner in 1941. A 1950 Kroll Map indicated that Continental Can occupied this site and Reynolds Aluminum occupied Parcel C. A 1956 aerial photograph of this area, shows that all buildings had been

removed and the site appears level and presumably planted with cover vegetation, such as grass. According to King County Tax Assessor records, the existing warehouse on Parcel C was constructed in 1960.

The warehouse on Parcel C was built in 1960-61 and had an address of 608-668 South Othello Street. The original owner is listed as the Jack Benaroya Company.

According to Don Romkee, Manson Construction purchased the Parcel B property in approximately 1982 and leased this property out to tenants until 1988 when he sold the property to the Othello Street Warehouse Corporation. Mr. Ray Aspiri, General Manager for Tempress, informed us during a May 21, 1996, phone conversation, that ABC Tool & Dye (a predecessor of Tempress) purchased the property from Continental Can in approximately 1972. Tempress is the current owner and occupant of this building and the adjacent parking area.

Don Romkee reported that Messans Traffic and Service originally leased the property in approximately 1982. Messans Traffic was purchased by Mega Terminals, Inc. in 1985. Norse Pacific & Steamship Line in turn bought Mega Terminal, Inc. in 1989-90. Pacific Terminals and Norsk Pacific merged in 1990-91 and became Pacific Terminals Inc.

Parcel D and adjoining parcels to the east of the Tempress building were historically used as a parking area for Continental Can employees and as a truck garden/small farm. From approximately 1989 to 1991, Parcel D was leased to Northland Containers for reconditioning activities which included stripping, cleaning, and painting steel cargo containers. The site is currently vacant, unpaved and surrounded by a cyclone fence.

Plant Structures

1917 to 1929. During the 1917-1929 occupancy of the subject property by Seattle-Astoria Iron Works, buildings on the property included an office building at the corner of Myrtle Street and Fox Avenue (currently 7th Avenue South), a machine shop to the west of the office building, just south of Myrtle Street; further to the west adjacent to the Duwamish was a foundry. A wharf is also depicted at the northwest corner of the property. To the south of these structures, from east to west was a boiler room, a pattern storage shop, a steel cutting shop, and a blacksmith shop. To the south of the iron works, in the general vicinity of Parcel C was the Johnson Brothers & Blanchard ship building operations.

1930 to 1970s. A site plan for the subject property, dated 1943, shows the Continental Can plant's buildings as covering the majority of the property

(Figure 3). Prominent features included the existing office building, the existing warehouse which is shown as the Assembly Department, a canning plant (the existing Tempress building); a sales and service office building at the northwest corner of the site; a paintshop; an oil house, a boiler house; and four USTs. Based on a 1930 plot plan, it appears that many of these structures were centrally heated from the boiler house which was fueled by one of the USTs. A four-inch gravity oil line is depicted as stemming from tank cars located at the rail spur to the south of the Tempress Building which traversed Parcel A and supplied the 12,000-gallon fuel oil UST via an oil pump house.

City of Seattle Building Department records indicate that a painting spray booth was constructed in June of 1974 in the wood-working shop. Also in 1974, a boiler room was constructed on the third floor of the Tempress building, as a plastic molding operation (the predecessor company of Tempress) occupied the first floor as a warehouse.

According to King County Department of Assessments records, the warehouse on Parcel C, was constructed in 1960-61.

1980s until Present. The Continental Can buildings were removed from the subject property during the 1986 to 1988 time period, with the exception of the two warehouses, the office building, and the dockyard building.

Underground Storage Tanks and Associated Structures

A 1930 site plan map by Troyer-Fox Manufacturing Company, identifies two fuel oil tanks, 40-barrels and 30-barrels, and one 463-gallon gas tank.

A 1943 site plan for the subject property identifies several USTs and the approximate locations of these tanks are depicted on Figure 2. The following is a brief description of these tanks:

- ▶ 1,250-gallon diesel tank (approximately 40 feet south of Myrtle Street and 70 feet east of the west end of Myrtle Street;
- ▶ 12,000-gallon fuel oil tank (approximately 10 feet south the above-mentioned diesel tank) and associated oil pump and oil house;
- ▶ 40-barrel oil tank, about 1,600-gallon capacity (at the northeast corner of the office building on 601 South Myrtle Street); and

- ▶ 45-barrel oil tank which is about 1,800-gallons (approximately 20 feet west of the Parcel B warehouse, and 10-feet north of the south end of the warehouse).

City of Seattle building permits for the subject property include the installation of two additional USTs in 1969, and a 10,000-gallon UST for PS 200 fuel oil in 1973.

The Earth Consultants report identifies five ASTs that reportedly stored fuel and waste oil that were located in the northeastern portion of the open, paved area in 1988. These tanks were enclosed with a metal containment box.

According to Mr. Dan Dolmseth, all known USTs and ASTs were removed from the subject property in the mid- to late 1980s. However, he was not aware of the existence of a heating oil tank, located at the northeast corner of the office building, that is depicted in several site plans from the 1930s and 1940s (Figure 3).

Duwamish Waterfront Activities

In a 1946 aerial photograph of the subject property, a half-circle shape of a ship turning basin can be seen along the northwestern corner of the subject property with two rows of pilings extending out into the Duwamish. A 1985 aerial photograph of the subject property, shows a more pronounced inlet at the northwest corner of the subject property.

Mr. Dolmseth, former Chief Financial Officer for Manson Construction, informed us during a May 21, 1966, phone interview, that Manson Construction had purchased a parcel of land adjacent to the Duwamish Waterway from Continental Can in the 1960s. He stated that fill material from the undeveloped Trident Submarine base was placed on the property.

City of Seattle documents for the subject property included several dredge and fill permits dating from 1976, when a permit was granted to place 65,000 cubic yards of sand and gravel at the subject property, to a 1984 permit to dredge 7,000 cubic yards of materials.

No title documents were available for review.

6.2 Surrounding Properties

A listing of firms, historically located in the surrounding area of the subject property, with the potential for environmental effects is presented

in Appendix D. The history of immediately adjacent properties are discussed below.

North and Northeast

The **National Steel Corporation Company** was established to the immediate north of the subject property, north of Myrtle Street and west of Fox Avenue in approximately 1908, according to Ken Griffin, former Vice President of National Steel Corporation. Tax assessor records indicate that buildings were constructed in 1921 and 1942. Originally the National Steel Corporation was a ship building company and a 1956 photograph of this property shows a number of torpedoes being stored in the yard. Operations expanded to the north during the 1940s and additional manufacturing processes included sheet metal and boilers production.

Mr. Griffin stated that Mr. Wilson, one of the original owners of this company, sold the National Steel Corporation Company to the Eisinga family in approximately 1945 which managed the company up until about 1966 when operations were moved to California. The Seattle Boiler Works purchased this property in approximately 1966 and is currently at this location.

The **Great Western Chemical Company (GWCC)**, located to the northeast of the subject property, was developed in 1918 by the Seattle Chain & Manufacturing Co. The company held a land lease from King County from 1918 to 1937, when they purchased the property (Lots 11 through 14) outright. The majority of the chain manufacturing facilities were located adjacent to and east of the current GWCC operation. Seattle Chain forged industrial chain using at least 10 oil- and coke-fired furnaces. The furnaces were located at the north and south wings of the main structure, which was adjacent to East Marginal Way South. During the chain manufacturing period, most of the western portion of the property was undeveloped.

In the late 1940s, ownership of Seattle Chain apparently transferred to interests headed by a Raymond Round of Ohio. The corporation subsequently was renamed Round-Seattle Chain Co. City of Seattle building permits indicate that Round-Seattle Chain constructed a small brick industrial incinerator on Lot 14 in 1954. In August 1954, however, the chain company was again sold to Republic Steel. Republic then sold all lots to Marian Enterprises two years later in November 1956 and Great Western Chemical Company established a lease for operations. Great Western Chemical has been at this location since that time. Developments included the installation of USTs in 1956, and additional USTs were installed in the 1970s. In 1989, plant renovations were implemented

including the closure of all chemical product USTs on the site. Closure of the main UST tank farm was completed in 1990. Since 1990, ongoing remedial activities as discussed in the *Agency File Review* section have occurred on this site.

Northland Services Inc. also has operations at 600 South Myrtle Street, located approximately 300 feet to the northeast of the subject property. This is the former location of the Tyee Lumber Company which operated from approximately 1938 to 1982. The Tyee operation plane-finished and re-sawed rough milled lumber for use in finished millwork. Wood was treated with the preservative pentachlorophenol (PCP) in a dip tank area. The Tyee Lumber Company operations were sold to CECO Corporation in an approximately 1982 and is currently leased to Northland Services Inc. and Sunmar Shipping Inc.

East and South East

To the immediate east of the subject property is the Tempress site, a plastic manufacturing company. This site was the location of the former Continental Can canning plant and was constructed in 1936. According to Mr. Aspiri, Manager of Tempress, the buildings were originally heated by a central boiler system.

From approximately 1917 to 1930, the property to the east of the subject property and south of Myrtle Street was occupied by the Washington Excelsior Box factory. From approximately 1930 to 1950 the Casein Company/Borden Company was at this location. From 1950 until the early 1990s, businesses located between 7th and 8th Avenues South and to the immediate south of Myrtle Street, from west to east included Commercial Welding; Boyce Transfer; and Tyee Lumber/Nelson Trucking. Currently this block is occupied by Commercial Welding; Caffè D'Arte, a coffee roasting plant; Cryogenic Repair, a division of Dry Ice Corporation; Glacier Marine/AK Pacific Inc; and The Plank Company.

Developments between 1930 and 1950 included the construction of the Markey Machinery foundry to the southeast of the subject property, and Sternhoff Metals scrap yard to the east across 8th Avenue. The Sternhoff Metals scrap yard is discussed in more detail in the **REGULATORY LIST AND FILE REVIEW** section.

7.0 RESULTS OF ASSESSMENT

7.1 Subject Property

There is a potential for soil and groundwater to have been adversely impacted by past activities at the subject property. The following summarizes our findings.

Potential Impact to Soil and Groundwater

As reported in the EC 1988 report, elevated concentrations with one exceedence of MTCA cleanup levels of TPH and solvents were detected in soil and groundwater samples, respectively. Potential on-site sources of TPH are the former USTs and ASTs. Solvents were reportedly not widely used on the property. However, one tenant at the Pacific Terminals Inc. facility recalls a spill during the unloading of a container at the northwest dock on Parcel B, that may have been linked to the one time disposal of waste oils and solvents that is documented in the agency files for the subject property.

Sediments and Fill Material

Aerial photographs, an interview with Mr. Dolmseth, and City of Seattle Building Department records indicate that fill material has been placed on the property. The origins of the fill material is not certain.

Asbestos-Containing Materials

An asbestos survey and abatement was conducted at the 601 South Myrtle Street office building. Some suspect ACM remains in this building. Observed suspect ACM include floor tiles, window putty. Observed suspect ACM at the warehouse at 660 South Othello Street, includes floor tiles, vinyl flooring, and ceiling tiles. No suspect ACM in a deteriorated condition was observed.

Lead-Based Paint

As with any structures built before 1980, there is a potential for lead-based paint surfaces to exist. However, a limited screening with LeadCheck™ swabs did not detect lead-based paint.

PCB Ballasts and Fluorescent Light Tubes

Some fluorescent lighting was observed in the office building and adjoining warehouse. Given the age of these buildings, and the EC survey of these

ballasts, PCB-containing ballasts likely are still present, primarily located on the first floor of the office building. PCB-containing ballasts have special disposal requirements.

Seattle City Light was contacted to determine if there were any PCB-containing transformers in the vicinity of the subject property. Twelve transformers were identified. Four of these transformers were untested and the remaining eight were either PCB-free or contained less than one part per billion.

7.2 Adjacent Properties

Several nearby properties have documented releases to soil and groundwater. The Great Western Chemical Company has removed or closed the chemical product USTs on its property, completed other remedial measures and recently accomplished investigations to define the extent of off-site migration of these constituents, including soil vapor and groundwater investigations at the subject property. A Hart Crowser report presenting the findings of this investigation indicates that groundwater in the vicinity of the northwest corner of the subject property has been impacted by chlorinated solvents originating at the GWCC property. The groundwater at the subject property is not a drinking water aquifer and thus presents no threat in that respect. Data suggest that concentrations of chlorinated solvents in the groundwater have attenuated naturally over time.

The former Sternoff Metals property, currently Remedco Environmental Services, is located in a potentially upgradient groundwater flow direction from the subject property, and no remediation has occurred at this property to-date.

7.3 Limitations

Work for this project was performed, and this report prepared, in accordance with generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. It is intended for the exclusive use of Maple Leaf Property Management, for specific application to the subject property. This report is not meant to represent a legal opinion. No other warranty, express or implied, is made.

It should be noted that Hart Crowser relied on information provided by the individuals indicated above. Hart Crowser can only relay this information and cannot be responsible for its accuracy or completeness.

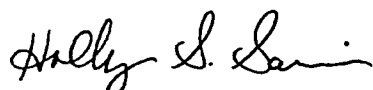
Our work did not include sampling or testing of drinking water for lead content, sampling for indoor air quality, assessment of ventilation and sewer systems, sampling for radon vapor, identification of PCB transformers, a "good-faith" survey of asbestos and lead, and other items not the standard of practice for our time, unless otherwise noted herein.

Any questions regarding our work and this report, the presentation of the information and the interpretation of the data are welcome, and should be referred to Holly Sawin or Julie Wukelic.

We trust this report meets your needs.

Sincerely,

HART CROWSER, INC.



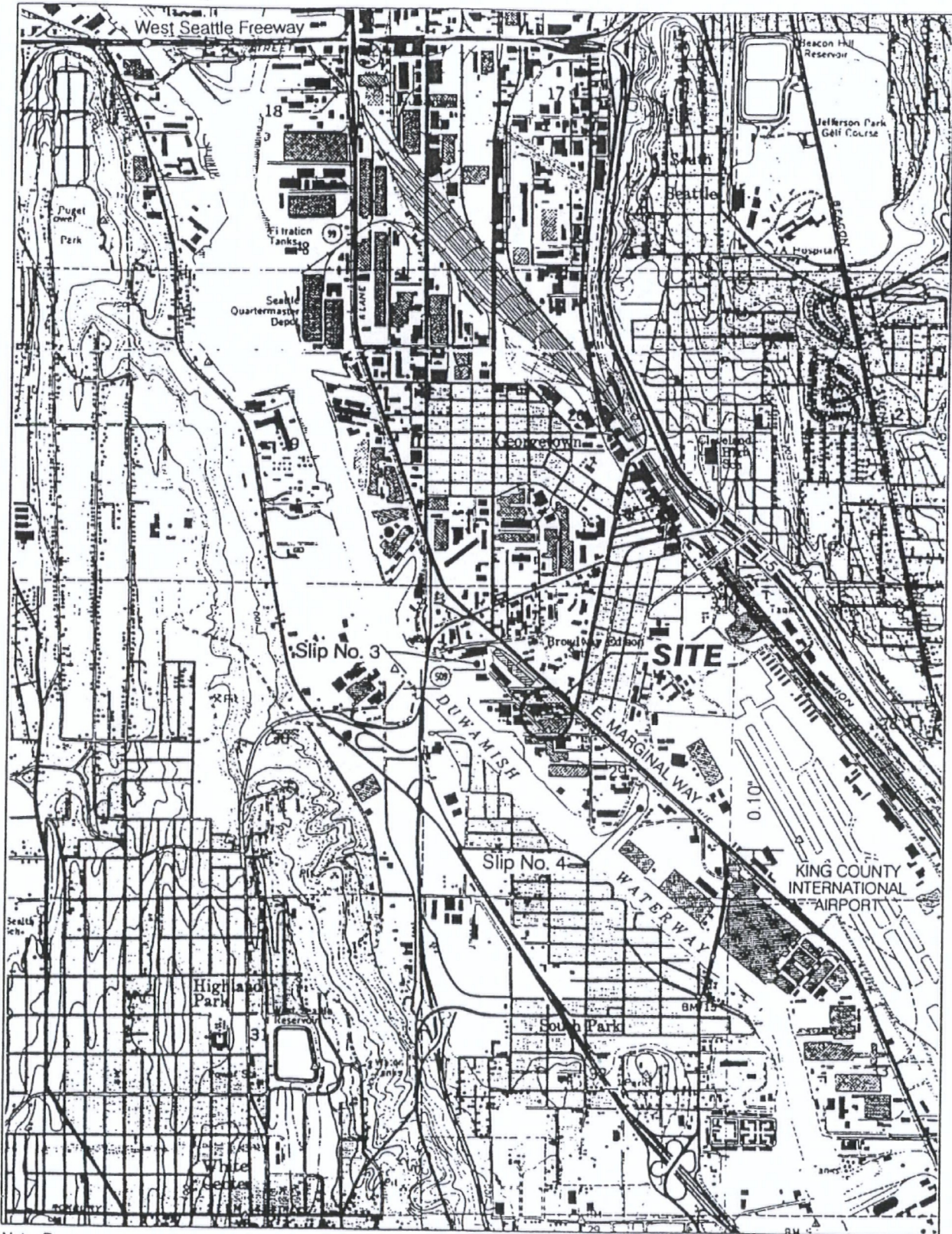
HOLLY S. SAWIN
Staff Environmental Scientist



JULIE K.W. WUKELIC
Division Manager
Property Assessment/Regulatory Division

HSS/JKWW:sdc
MAPLELF.fr

Vicinity Map



Note: Base map prepared from USGS 7.5 minute quadrangle map of Seattle South, Washington, dated 1973.

0 1/2 1
Scale in Miles



HARTCROWSER

J-4548(A)

5/96

Figure 1